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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/753,226

12/28/2000

Jonathan M. Zweig

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09/28/2006

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EXAMINER

PHAN, TRI H

ART UNIT

PAPER NUMBER

2616

DATE MAILED: 09/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.		Applicant(s)	
	09/753,226		ZWEIG ET AL.	
	Examiner		Art Unit	
	Tri H. Phan		2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12,14,15 and 22-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12,14,15,22,23 and 34-37 is/are allowed.
- 6) ☐ Claim(s) 24-26,28-31,33,38 and 40 is/are rejected.
- 7) ☐ Claim(s) 27,32 and 39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>08/11/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment/Arguments

1. This Office Action is in response to the Response/Amendment filed on August 11th, 2006. Claims 1-11, 13, and 16-21 are now canceled. Claims 12, 14-15, and 22-40 are now pending in the application.

Information Disclosure Statement

2. The application (US 09/751332 filed 12/28/2000) listing of information disclosure statement (IDS) submitted on August 11th, 2006 is not a proper information disclosure statement. However, the information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 24-26, 28-31 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chuah, Mooi Choo** (U.S.6,115,390; hereinafter refer as '**Chuah**') in view of **Miller et al.** (U.S.6,873,627; hereinafter refer as '**Miller**').

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- In regard to claims 24 and 30, Chuah discloses, *a method comprising determining by an access point ('AP'; figure 2, element 236) whether a cast frame is scheduled for transmission to a plurality of wireless units* (for example see col. 16, lines 23-27 where the broadcast or multicast 670 in figure 6B, e.g. “*cast frame*”, with transmit schedule 660 is disclosed in figure 6E); *each of the plurality of unicast frames being uniquely addressed with a media access control 'MAC' address of a wireless unit* (figure 7D, element 708; col. 16, lines 11-13) *and transmitting the plurality of unicast frames in succession to the plurality of wireless units* (col. 16, lines 23-27). Chuah does disclose about the proxy registration agent in the base station or access point for receiving and forwarding the registration care-of address for the end users as disclosed in col. 8, lines 21-30; but fails to disclose where “*the MAC addresses are internally stored within the access point*”. However, in order for the access point to communicate with the end users, the MAC addresses of the end users are designed to store within the access point, so that the access point can identify where or with whom to communicate with, e.g. receiving/forwarding data from/to the end users. Chuah does disclose about broadcast, multicast, and unicast packets (for example see figures 6B, 7A,D); but fails to explicitly disclose how to “*translating the cast frame into a plurality of unicast frames*”. However, such implementation is known in the art.

For example, Miller discloses a system and method for sending packets with different formats such as broadcast, multicast and unicast packets over the network; wherein the multicast packets are converting into unicast packets (“*translating the cast frame into a plurality of unicast frames*”) at the server and sending to each unicast address on the list stored in the forwarding table (for example see figures 3-5; col. 9, line 63 through col. 10, line 8; col. 9, line 8-16).

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the method for converting the multicast packet into unicast packets of the server as taught by Miller into the Chuah's server, with the motivation being to utilize efficient bandwidth as disclosed in col. 8, lines 24-26.

- Regarding claims 25-26 and 31, Chuah further discloses, *the cast frame is a multicast frame directed to a predetermined group of wireless units* (col. 14, lines 17-18 and figures 6B and 6F show a broadcast/multicast frame structure); *the cast frame is a broadcast frame intended for every wireless unit within a range to receive the frame* (col. 14, lines 17-18 and figures 6B and 6F show a broadcast/multicast frame structure).

- In regard to claim 28, Chuah further discloses *about transmitting the unicast frames in succession to the wireless units addressed by the MAC addresses* (col. 16, lines 23-27; where the destination address of the unicast subframe is disclosed in figures 7A, 7D; col. 16, lines 11-13).

- Regarding claim 29, Chuah further discloses about *receiving the acknowledgement frame from each of the wireless units addressed by the MAC addresses* (figure 23, elements 2323 and 2354 where the ACK and MAC address is disclosed in the downlink unicast sub frame in figures 7A and 7C).

- In regard to claim 33, the combination of Chuah and Miller further discloses, *wherein the translating of the cast frame using the MAC addresses as destination addresses for*

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corresponding plurality of unicast frames (Chuah: figure 7D, element 708; col. 16, lines 1-13; Miller: figures 3-5; col. 9, line 63 through col. 10, line 8; col. 9, line 8-16); but lacks to disclosed where the *MAC addresses of the plurality of wireless units stored within the access point*.

However, in order for the access point to communicate with the end users, the MAC addresses of the end users are designed to store within the access point, so that the access point can identify where or with whom to communicate with, e.g. receiving/forwarding data from/to the end users.

Thus it would have been obvious to the person of ordinary skill in the art at the time of the invention was made to implement the method for storing the MAC addresses at the Chuah's access node, with the motivation being to provide the ability to communicate with the registered end users in receiving/transmitting data from/to end users.

5. Claims 38 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Chuah**, **Mooi Choo** (U.S.6,115,390; hereinafter refer as '**Chuah**') in view of **Miller et al.** (U.S.6,873,627; hereinafter refer as '**Miller**'), and further in view of **IEEE 802.11** (Chapter 7, provided by applicant; hereinafter refer as '**IEEE 802.11**').

- In regard to claims 38 and 40, the combination of Chuah and Miller discloses, a method for transmitting information to a plurality of devices, comprising translating a cast frame into an Unicast frame (Chuah: figure 7D; col. 16, lines 1-17; Miller: figures 3-5; col. 9, line 63 through col. 10, line 8; col. 9, line 8-16; col. 2, lines 46-64) and transmitting the Unicast frame to a destination device (Chuah: col. 16, lines 23-27); but lacks what IEEE 802.11 discloses wherein the unicast frame is an *Eavesdrop Unicast frame being a data frame that includes at least four*

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address fields, a first address field including a destination address of the destination device and a fourth address field including a value assigned to the plurality of devices including the destination device (page 34, figure 12 and page 44, figure 22 shows the structure of a data frame which is the same as applicant's Eavesdrop Unicast packet shown in figure 8 of the specification); *and wherein the value is a medium access control 'MAC' address* (page 38, section 7.1.3.3, lines 1-5).

Thus it would have been obvious to include the structure of the Eavesdrop Unicast packet so as to conform to the IEEE 802.11 protocol. The motivation for conforming to the protocol is so that there is a standard of communication that allows many users to communicate.

Response to Arguments

6. Applicant's arguments filed on August 11th, 2006 with respect to claims 24-26, 28-31, 33, 38 and 40 have been considered but are moot in view of the new ground(s) of rejection.

Allowable Subject Matter

7. Claims 27, 32 and 39 are objected to as being dependent upon a rejected base claims (claims 24, 30 and 38), but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 12, 14-15, 22-23 and 34-37 are allowed as indicated in the previous office action.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Bhagavath et al. (U.S.6,163,810) is cited to show device and method for improving the managing information between unicast and multicast host in the telecommunication architectures, which are considered pertinent to the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tri H. Phan, whose telephone number is (571) 272-3074. The examiner can normally be reached on M-F (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H. Pham can be reached on (571) 272-3179.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(571) 273-8300

Hand-delivered responses should be brought to Randolph Building, 401 Dulany Street, Alexandria, VA 22314.


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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office, whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tri H. Phan
September 25, 2006



CHI PHAM
SUPERVISORY PATENT EXAMINER 9/26/06